

5.18 CUMULATIVE IMPACTS

5.18.1 Introduction

The approach used to evaluate potential cumulative impacts for the PEF Expansion project is the same approach used in the AFC for the existing PEF. The cumulative impacts assessment for both projects is based on the California Environmental Quality Act (CEQA) (Cal. Public Resources Code [PRC] §21083) and the *CEQA Guidelines* (California Code of Regulations [CCR] §15130), which requires that the discussion of cumulative impacts be “guided by the standards of practicality and reasonableness” [PRC §21083(b)]; and that “the discussion include a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts” [CCR §15130(b)(1) (A)]. The *CEQA Guidelines* require that cumulative impacts be discussed when they are significant, and that the discussion of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence. However, the *Guidelines* state that the discussion need not provide the impacts discussion in as great of detail as is provided for the project’s impacts.

Therefore, the purpose of this section of the AFC for the PEF Expansion is to:

- 1) Identify past, present, and reasonably foreseeable actions in the PEF area that could affect the same resource(s) as were identified in the AFC for the existing PEF
- 2) Determine if the impacts of the PEF Expansion and the other actions would overlap in time or geographic extent
- 3) Determine if the impacts of the PEF Expansion would interact with, or intensify, the impacts of the other actions
- 4) Identify any potentially significant cumulative impacts

Since the PEF Expansion is an addition to the existing PEF, a brief description of that facility is provided for reference purposes. The PEF Expansion consists of a nominal 160 MW simple cycle combustion turbine generator. The PEF Expansion area will be approximately two acres located entirely within the existing PEF 31-acre site boundary. The PEF Expansion requires no modification to the existing PEF offsite linear facilities (e.g., electric transmission line, fuel gas supply line, or water supply line). The PEF Expansion will use the existing PEF administration and control, warehouse and shop, and water treatment buildings. Site access and onsite roadways are common with the existing PEF. Figure 3.1-1 of this application depicts the new facilities required for the PEF Expansion project within the footprint of the existing PEF.

Where potentially significant impacts were identified in 99-AFC-7, an assessment of cumulative impacts was provided in the respective resource section(s), from which relevant sections are appended to this application in Attachments A through N.

The PEF Expansion is located within the same project study area as the existing PEF. Hence, the affected environment section from the existing PEF is considered applicable to the PEF Expansion with appropriate information updating and revision.

Projects that were identified in 99-AFC-7 as potentially contributing to cumulative impacts with the existing PEF plant site are substantially the same for the PEF Expansion because the geographic area of influence is the same. For the PEF Expansion cumulative assessment, the area of influence is defined as the area within a five-mile radius of the existing PEF site. This cumulative assessment of the PEF Expansion does not consider the existing PEF linear facilities because these facilities have already been constructed. Projects or proposed projects of potential regional significance to the cumulative impact discussion for the PEF Expansion are also considered in the cumulative analysis, since there is no development proposed within the 5-mile radius. Information was gathered on projects that either: 1) have submitted an application for required approvals and permits; 2) have been previously approved and may be implemented in the near future; or 3) are contemplated and reasonably anticipated, but have not been formally proposed. While these projects are outside of the 5-mile radius, they have been included because, together with the PEF Expansion, they could generate potential impacts of regional significance.

Information for the cumulative setting from 99-AFC-7 concerning potential future projects needed for the cumulative impact assessment was primarily obtained via personal communications. Information available via the Internet was additionally reviewed. Information was provided by the Kern County Planning Department, San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD), California Department of Transportation (Caltrans), CEC, the City of Arvin, and Tejon Ranch.

The potential cumulative impact of the existing PEF and the PEF Expansion as well as other projects within the study area is the additive construction and operation of the individual projects. The following assessment focuses on the potential overlap of construction and operation impacts among various projects.

Potential cumulative impacts were identified if the existing PEF operation and the PEF Expansion construction and operation impacts would contribute to the impacts of reasonably anticipated future projects under construction at the same time. The magnitude of such cumulative impacts is dependent in part, on the extent of construction overlap in time and geographic area. For the purposes of this cumulative impact assessment it is anticipated that the construction phase for the PEF Expansion will last 12 months and that construction will

commence in 2006 and commercial operation will commence in 2007. This assessment also considers potential cumulative impacts that could occur during the operational phase of both the existing PEF and PEF Expansion.

5.18.2 Cumulative Impacts Analysis

Table 5.18-1 presents a list of known and potential projects considered in this cumulative impact assessment. The time frames for these potential developments are also indicated. The future projects identified in this table are described below. Figure 5.18-1, Location of Projects Considered in the Cumulative Impacts Assessment, illustrates the general geographical locations of these projects. As discussed above, there is no proposed development within 5 miles of the existing PEF site, but because of potential impacts of regional significance, potential cumulative impacts from the following developments are discussed.

5.18.2.1 Tejon Industrial Complexes

Tejon Industrial Complex – West. The Tejon Industrial Complex – West is located on the west side of Interstate-5 (I-5) on Laval Road. A Final Environmental Impact Report was completed in February 2000, and was certified by and approved by the Kern County Board of Supervisors in April 2000 (Casdorff 2000). The Development Agreement for the project was approved by Kern County in May 2000 (Casdorff 2000). The complex is located approximately seven miles from the existing PEF plant site. The complex consists of approximately 341 acres of development, primarily for industrial and commercial uses, as well as the construction of a new fire station. The developer has obtained all permits from Kern County. Construction of the project commenced in October 2000, (Rickels, 2000). Currently, 2.45 million square feet out of 5 million square feet has been developed (Lorelei H. Oviatt, AICP, Supervising Planner, Kern County Planning Department, letter dated March 23, 2005). The project included road improvements at the I-5 Laval Road intersection and many of these improvements were constructed during the development of the Petro Truck Stop (Casdorff, 2000). Caltrans has evaluated the need for improvements of the I-5 Laval Road intersection in response to the increased traffic that would occur as a result of the complex, as described in the section below (Rickels, 2000). While construction will continue in the near future for the portion of the complex that has not been constructed, potential significant cumulative impacts are not expected to occur because of the implementation of mitigation measures to reduce air quality-related impacts and because of the implementation of traffic improvements. Further, potential cumulative impacts associated with the need for construction workers are not expected because the trades used to construct industrial/commercial buildings are not the same as the trades used to construct a power plant.

TABLE 5.18-1

PASTORIA ENERGY FACILITY EXPANSION PROJECT CUMULATIVE PROJECTS LIST

Project Name/Lead Agency	Project Description	Status/Timing	Location
Tejon Industrial Complex – County of Kern West and East Complexes	West: 341 acres of industrial and commercial development approved East: 1109 acres of industrial and commercial development in litigation and not built	West: Construction commenced October 2000; 2.45 million square feet constructed out of 5 million square feet available East: Not built	West: Wheeler Ridge, approximately 7 miles from the existing PEF East: Same as above
San Emidio New Town Specific Plan – County of Kern	9,447 acres of residential and industrial development	County Board of Supervisors approved Plan in 1992, lost water entitlements and land is partially owned by Wildlands Conservancy; no development currently planned	Southwest of Tejon Industrial Complex, approximately 7 miles from the existing PEF
Centennial – County of Los Angeles	Master-planned community of about 23,000 homes, along with schools, medical facilities, police and fire stations, recreational facilities and plenty of commercial and industrial space for businesses	25 years of phased development	Highway 138 just east of Interstate 5
Interstate 5, State Route 99, and other State Routes – Caltrans District 6 Within Kern County	Various construction and improvement projects	No projects planned	Intersection of I-5 and Laval Road, Wheeler Ridge, CA; SR 99 and Interstate 5 Intersection
Tejon Ranch Developments (Within Kern County)	Future projects not reasonably foreseeable	No projects, except the Tejon Industrial Complex – West, are reasonable foreseeable during the PEF Expansion AFC process	Tejon Ranch property north of Tehachapi Mountains.

Figure 5.18-1. LOCATION OF PROJECTS CONSIDERED IN THE CUMULATIVE IMPACTS ASSESSMENT FOR THE APPROVED PEF AND PEF EXPANSION

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Tejon Industrial Complex – East. The Tejon Industrial Complex – East is a proposed 15 million square feet Industrial and Commercial development on 1109 acres. The status is currently in litigation pending development and review of a supplemental analysis to facilitate approval of a set aside (Lorelei H. Oviatt, AICP, Supervising Planner, Kern County Planning Department, letter dated March 23, 2005).

Construction of the PEF Expansion is anticipated to commence in 2006 with peak activity occurring in the 7th month of 12-month construction schedule. If construction of the PEF Expansion along with continued construction of the Tejon Industrial Complexes were to coincide with Caltrans improvements to the Laval Road exit/entrance to I-5, potential cumulative impacts on traffic and transportation could occur. However, cumulative impacts would be considered less than significant due to the temporary nature of the PEF Expansion construction period (12 months) and the expected implementation of the Traffic Plan (required by the existing Conditions of Certification for 99-AFC-7) that will take any overlapping construction schedules into consideration.

5.18.2.2 San Emidio New Town Specific Plan

The Kern County Board of Supervisors adopted the San Emidio New Town Specific Plan (Plan) on October 5, 1992. The Plan included 9,447 acres of mixed-use development (20,219 residential units with commercial and industrial uses), located west of I-5 and directly southwest of the Tejon Industrial Complex - West, approximately seven miles from the existing PEF site. To date, this Plan has not been implemented and no units have been built; potentially because the water entitlements were lost and most of the Plan area is owned by the Wildlands Conservancy and the local water district (Rickels, 2000). Kern County has stated that a new Specific Plan would need to be submitted to the County for review and approval due to the modifications in the original Plan. Based on these facts, cumulative impacts from the PEF Expansion, taken together with other regional projects, are not expected to occur since it is not foreseeable that the water entitlements will be resolved and the new specific plan completed before the PEF Expansion is constructed.

5.18.2.3 Interstate 5 – State Route 99

Caltrans District 6 has initiated a Route 99 Master Plan Effort in partnership with District 10, to identify needed improvements and develop themes for Route 99 corridor improvement through the San Joaquin Valley (<http://www2.dot.ca.gov/dist6/factsheets/docs/sr99transinvestment.pdf>). One of the primary goals is to upgrade the corridor to a full freeway from the interchange with Interstate 5 to Sacramento. These improvements would be constructed north of the existing PEF beginning at the I-5/99 interchange. Cumulative impacts from the PEF Expansion, taken together with these improvements, are not

considered significant because of the limited construction activities associated with the PEF Expansion.

5.18.2.4 Tejon Ranch Development Plans

Other than for the Tejon Industrial Complex – East, the Kern County Planning Department is not processing any other applications from Tejon Ranch (Lorelei H. Oviatt, AICP, Supervising Planner, Kern County Planning Department, letter dated March 23, 2005). Tejon Ranch has announced plans for a development called Tejon Mountain Village in the vicinity of Lake Tejon located near Frazier Park, but has not submitted an application. Another announced development project is the Centennial New Town being processed with the Los Angeles County Regional Planning Department. The Centennial Community is a proposed master-planned development of 23,000 homes phased over 25 years located along the Ranch's southernmost boundary along State Route 138 and east of Interstate 5 within Los Angeles County. The phased development would have no cumulative affect upon the PEF Expansion and is therefore not shown on Figure 5.18-1. Details regarding these proposed developments are posted on the Tejon Ranch website at www.tejonranch.com.

Due to the relatively great distances these potential Tejon Ranch developments are located from the existing PEF site, development of these projects would not result in a cumulative affect upon regional traffic and transportation during the construction timeframe for the PEF Expansion. Therefore, the cumulative impact is regarded as less than significant.

5.18.2.5 State Route 223 and Other State Routes

According to Kern Council of Governments (COG), State Route (SR) 223 will be widened to four lanes on the existing alignment near Arvin, California. Caltrans currently has no funding set aside to conduct a project assessment and environmental studies (Rickels, 2000). Therefore, construction of the project is not anticipated to occur within the next several years due to the low priority of the project funding. Although this project was included in the cumulative analysis for the existing PEF, it is not included in the PEF Expansion cumulative analysis because of the uncertainty of the improvements.

Information regarding the status of current projects on the Caltrans District 6 website at <http://www2.dot.ca.gov/dist6/factsheets/index.htm> indicates that there is no State Route 223 project nor are there projects for other State Routes (SR) in the region of the PEF Expansion including SR 138, SR 166, and SR 184.

5.18.2.6 Other Proposed Power Plants

An analysis of potential cumulative air quality impacts that may result from the proposed combustion turbines and other reasonably foreseeable projects is generally required when project impacts are significant.

As discussed in Sections 3.1 and 5.2, no urban-type development is expected within a six-mile radius of the project. The area surrounding the project is undeveloped; vegetated with non-native grassland, and used for cattle grazing and agricultural operations. To ensure that potential cumulative impacts are adequately considered, the air quality analysis included an evaluation of the operation of the PEF Expansion combined with the existing PEF.

5.18.3 Conclusion

In summary, no significant adverse cumulative impacts resulting from the PEF Expansion together with the regional development described above, are expected to occur.

5.18.4 References

The Cumulative Impacts, Section 5.18, references from 99-AFC-7 are applicable to the PEF Expansion with the exception of the updated references provided below. The references from Section 5.18 of 99-AFC-7 are included as part of Attachment H of this application.

Caltrans. 2005. Project Fact Sheets. <http://www2.dot.ca.gov/dist6/factsheets/index.htm>.

Caltrans. 2002. San Joaquin Valley Route 99 Transportation Investment <http://www2.dot.ca.gov/dist6/factsheets/docs/sr99transinvestment.pdf>.

CEC Status of All Projects, Updated 3/18/2005 http://www.energy.ca.gov/sitingcases/all_projects.html.

Oviatt, Lorelei H., AICP, Supervising Planner, Kern County Planning Department, letter dated March 23, 2005.